TABLE E–6—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT MORE THAN 152 METERS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
261 (162)	1000	501	282	170	110	71
241 (150)	400	209	110	60	36	23
225 (140)	225	102	50	28	16	10
209 (130)	100	48	21	11	7	5
193 (120)	50	19	9	5	3	2

AAAAASee § 22.627(b)(1)(iii). This table is for antenna heights of more than 152 meters (500 feet) above average terrain. For intermediate values of height and/or distance, use linear interpolation to obtain the maximum permitted ERP.

TABLE E–7—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)								
	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
108 (67)	1000	1000	1000	1000	1000	1000	1000	1000	1000
106 (66)	1000	1000	1000	1000	1000	1000	1000	1000	750
105 (65)	1000	1000	1000	1000	1000	1000	825	650	600
103 (64)	1000	1000	1000	1000	1000	775	625	500	400
101 (63)	1000	1000	1000	1000	440	400	350	320	300
100 (62)	1000	1000	1000	525	375	250	200	150	125
98 (61)	1000	700	450	250	200	125	100	75	50
97 (60)	1000	425	225	125	100	75	50	.....	.....

See § 22.627(b)(2). This table applies to control transmitters in the Boston, Chicago, Cleveland, Detroit, Los Angeles, New York-Northeastern New Jersey, Philadelphia, Pittsburgh and Washington, DC urban areas. This table is for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

[59 FR 59507, Nov. 17, 1994; 60 FR 9890, Feb. 22, 1995; 63 FR 68946, Dec. 14, 1998]

470–512 MHz TRUNKED MOBILE OPERATION

§ 22.651 470–512 MHz channels for trunked mobile operation.

The following channels are allocated for assignment to transmitters providing trunked public mobile service within the specified urban areas. All channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

Houston

488.0125	491.0125	488.0875	491.0875
488.0375	491.0375	488.1125	491.1125
488.0625	491.0625	488.1375	491.1375

New York-Northern New Jersey

473.0125	479.0125	473.1625	479.1625
473.0375	479.0375	473.1875	479.1875
473.0625	479.0625	473.2125	479.2125
473.0875	479.0875	473.2375	479.2375
473.1125	479.1125	473.2625	479.2625
473.1375	479.1375	473.2875	479.2875

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.653 Eligibility.

Only licensees already authorized to provide trunked mobile service or their successors in interest are eligible to apply for additional use of these channels for trunked mobile service, and then only in the urban areas already authorized.

§ 22.655 Channel usage.

The FCC is redesignating the public mobile channels in the 470–512 MHz range from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreases.

(a) The licensees in each market shall measure channel usage at least once every 3 months. These measurements shall be reported to the FCC within 30 days. Measurements shall be taken during the busiest 12-hour periods on 3 days (within a 7-day period) having normal usage. The information must be reported separately for each of the 3 days selected, must be reported

by dates, and must disclose the following:

(1) The number of mobile units in service during each of the days specified;

(2) The number of calls completed each hour;

(3) The total number of minutes during each hour that the channels were utilized for communications by the mobile units;

(4) The average channel usage for the busiest hour for the 3 days measured; and

(5) Any additional information that more accurately reflects channel usage.

(b) If the measured probability of blocking decreases below 25%, the FCC will redesignate channels not needed to maintain blocking at 25% or less. The number of channels needed to maintain blocking below 25% will be determined from the channel usage reports and the Erlang C tables.

(c) Although two or more channels are necessary to provide trunked service, the FCC may, pursuant to this section, reduce to one the number of channels assigned. In such cases, the licensee may provide non-trunked two-way public mobile service on the one remaining channel.

§ 22.657 Transmitter locations.

The purpose of the rules in paragraphs (a) and (b) of this section is to define the areas in which the 470–512 MHz channels are allocated for public mobile use. The purpose of the rules in paragraphs (c) through (f) of this section is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur. The protected TV station locations specified in paragraphs (d), (e)(1) and (f) of this section are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(a) *Base transmitter locations.* Base transmitter locations must be within 80 kilometers (50 miles) of the designated locations in this paragraph. Mobile transmitters must not be operated at locations more than 129 kilometers (80 miles) from the designated locations in this paragraph. Note: All coordinates are referenced to North American Datum 1983 (NAD83).

Urban area	N. latitude	W. longitude
Houston, TX	29°45′26.8″	95°21′37.8″
New York, NY–NE NJ	40°45′06.4″	73°59′37.5″

(b) *Mobile area of operation.* Mobile transmitters must not be operated at locations more than 48 kilometers (30 miles) from all associated base stations.

(c) *Protection from intermodulation interference.* Base transmitter locations must be at least 1.6 kilometers (1 mile) from the current main transmitter locations of all TV stations transmitting on TV channels separated by 2, 3, 4, 5, 7, or 8 TV channels from the TV channel containing the frequencies on which the base station will transmit. This requirement is intended to reduce the likelihood of intermodulation interference.

(d) Adjacent channel protection from mobile transmitters. Base transmitter locations must be at least 145 kilometers (90 miles) from the applicable protected TV station locations specified in this paragraph. This requirement is intended to provide a 0 dB minimum desired to undesired signal strength ratio at the Grade B contour of an adjacent channel TV station. Note: All coordinates are referenced to North American Datum 1983 (NAD83).

Control transmitter frequency range	Protected TV station location	TV channel
470–476 MHz.	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long..	(15)
476–482 MHz.	Scranton, PA, 41°10′58.3″ N. Lat. 75°52′19.7″ W. Long..	(16)

(e) *Co-channel protection from mobile transmitters.* Base transmitter locations must be at least the distance specified in paragraph (e)(2) of this section from the applicable protected TV station locations specified in paragraph (e)(1) of this section. This requirement is intended to provide a 40 dB minimum desired to undesired signal strength ratio at the Grade B contour of a co-channel TV station.

(1) The protected TV station locations are as follows (all coordinates are